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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/778,329	02/06/2001	Dahv A. V. Kliner	SD-8317	4875

7590 02/05/2003

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EXAMINER

HOFFMANN, JOHN M

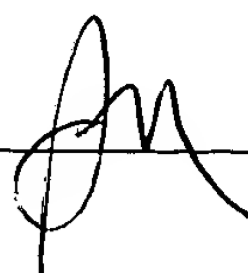
ART UNIT	PAPER NUMBER
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1731

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DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/778,329	Applicant(s) KLINER ET AL.	
	Examiner John Hoffmann	Art Unit 1731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 November 2002 and 23 December 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-29, 31-36, 38-47, 49 and 51-59 is/are pending in the application.
- 4a) Of the above claim(s) 52-59 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 34-36 and 38 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-13, 21, 28, 29, 41, 46 and 47 is/are rejected.
- 7) ☒ Claim(s) 14-20, 22-27, 31, 32, 40, 42-45, 49 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 52-59 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 7.

Claim Rejections - 35 USC § 112

Claims 11-16, 28, 41 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 refers to second rods. There is no prior mention of second rods. One of ordinary skill would not know how to interpret this limitation.

Claim 11, line 3 refers to "said glass tube" - it is unclear if the error is that claim 1 is suppose to recite a tube, or claim 8 or if claim 11 should have read "a glass tube".

Claim 41 is not understood as because there is no antecedent basis for "said porous packing plug".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1,4,5,7,29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hopkins 3395006

Figures 1, 4, 8 clearly show all of the limitations of claim 1. As to the bundle being contiguous see, col. 4, lines 24-26.

Claim 4: See col. 3, lines 34-42. It is deemed that an average index of the preform, is substantially that of an individual rod. The average index is predetermined by the glass rod chosen. The average index is inherently between the index of the core and the index of the clad.

Claim 5: see figure 4.

Claim 7, one can arbitrarily divide the bundle into two groups. The first group does have a first index, and the second group has the second index. Of course the first group also has the second index and the second group has the first index. The claims are comprising in nature and are open to having additional indices. The "target" index is the average index.

Claim 29: see col. 8, line 37.

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Claims 1,4,6 are rejected under 35 U.S.C. 102(e) as being anticipated by Allen 6243552.

From the drawings and example 1 (starting col 7) , the invention is disclosed. As per the above Hopkins rejection, the Allen average index is predetermined by the starting rods that are used.

Claims 4 and 6 are clearly met.

Claims 1, 8-9, 11-13, 33 are rejected under 35 U.S.C. 102(b) as being anticipated by Sink 4853020.

See figure 2 as well as col. 2, lines 33-50 of Sink.

As to claims 8-9, see col. 3, lines 43-51. One can arbitrarily divide the Sink rods into any reasonable number of groups of rods, for example the first, third, fifth...fibers is the first group and the second, forth, sixth...fibers make a second group.

Claim 11: First it is noted that from Applicant's claim 13, that the template is not a single structure. It is further noted that the claim does not require the displacement to be simultaneous. A group of rods may be displaced, one rod at a time. It is deemed that one can view Sink's replacement rods to be the template. The rods are partially displaced, prior to being fully displaced. Looking at Applicant's figure 10 (not 10A or 10B), the structure of 1004 just shows a simple flat displacement structure, no step is actually within the tube1001. 1004 has a shallow step. In the Sink method, one must apply a force to the end of the replacement rod - that force would be applied with some structure; The replacement rod forms a "step" with respect to the pressure-applying

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structure. To summarize: Applicant's figure 10 shows fibers being simultaneously displaced with a shallow, single-unit template; Sink displaces fibers sequentially with a deep, multi-fiber template.

Claims 12-13 further define the plugs - however, the claim 11 does not require plugs. There can be steps instead of plugs; claims 12-13 do not further limit the steps. Sink has steps, not plugs. Since Claims 12-13 do not further limit the steps embodiment, they do not require any more limitations than claim 11 does for the steps embodiment. Sink reads on the steps embodiment, and thus anticipate the claim 12-13.

Claim 33: AS to the "two or more different refractive indices" first it is noted that the claim does not require any think to have the two or more different indices. The broadest possible interpretation is that that this group has all possible indices - from 1 to that which is highest know. Thus, no matter what the final index/indices is, it will be within the range spanned by those refractive indices. Referring to figure 3 of Sink, it is clear that all of the "M" fibers would have the same (i.e. average) index. It is noted that this average is one possible average; i.e. there are other fibers in the bundle that would not be part of this average. Alternatively, one can calculate the average core index of the inner fibers - or the average clad index of the inner fibers - or any other average that one chooses. It is noted that the claims are comprising in nature and are open to additional rods that do not have the "average" index and the chemical composition. And the rods are open to having additional compositions and/or indices. So, although the inner rods probably have indices that are not the same as the average, such does not matter, because they have additional glass which has the same index as the average.

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And that is because the rods in any group are identical - and thus would have identical indices. The average index of identical indices would be the same as the index of any one of the identical indices.

Claims 1,2, and 21, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott, 5378955.

Scott clearly discloses the invention of claim 1. AS to claim 2, see col. 3, lines 13-14. As to claim 21: features 7-8 (screens) are deemed to read on porous packing plugs.

Claim 28: see col. 2, lines 58-62. The rods are approximately 0.8 mm in diameter. Thus one could make an arbitrary plurality of about 7 rods- this would have a an effective diameter of about 2.4 mm. As a rough calculation, examiner determined there would be about 860 fibers in a completely packed 1-inch tube. So, even with significant errors, there would be between 30 and 30,000 fibers.

(e) the invention was described in-

- (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
- (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claim 39 is rejected under 35 U.S.C. 102(e) as being anticipated by Wang 6148258.

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Wang discloses the invention at col. 10, lines 45-60. The specific assembly steps are disclosed as per the paragraph spanning cols. 9-10 of Wang; this refers to Patent 5802236. Example 1 (col. 10 of 5802236) discloses the assembly steps.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hopkins.

See how the art is applied above. Hopkins does not disclose that the bundle is made prior to inserting into the tube. See *In re Burhans*, 154 F.2d 690, 69 USPQ 330 (CCPA 1946) (selection of any order of performing process steps is prima facie obvious in the absence of new or unexpected results); *In re Gibson*, 39 F.2d 975, 5 USPQ 230 (CCPA 1930) (Selection of any order of mixing ingredients is prima facie obvious.). It would have been obvious to make the sheathed bundle by adding the fibers simultaneously, rather than one by one.

Claim 3 Figure 6 and 8 show the progression along the length.

Claims 46-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wang.

Wang does not teach the size limitations of the claims. It would have been obvious to make the starting fibers as large and as numerous as desired - depending upon the amount of final product is desired - with no new or unexpected results.

Allowable Subject Matter

Claims 14-20, 22-27, 30, and 40, 42-45, 49, 51 and are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 34-36 and 38 allowed.

Claim 41 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

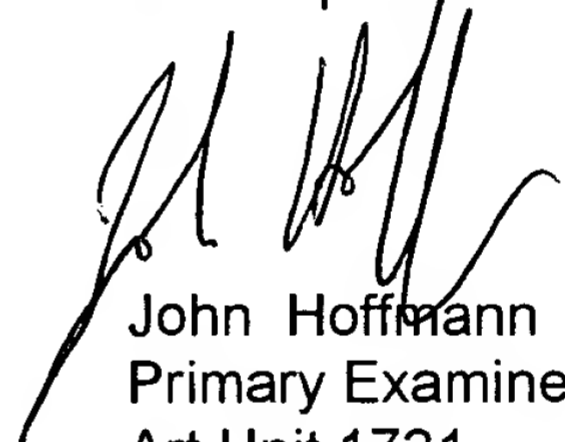
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Phaneuf (2), Cook, Singer (2), Strack, Hicks, Goodrich, Hays, Greenaway, Burke, Fleck, Di Giovanni, Miyazaki, Seto, Saitou, Nippon, Showa, and

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Furu are cited as being relevant to the disclosed invention. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Hoffmann whose telephone number is 703-308-0469. The examiner can normally be reached on Monday through Friday, 7:00- 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Griffin can be reached on 703-308-1164. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7115 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.


John Hoffmann
Primary Examiner
Art Unit 1731
1-29-03

jmh
January 29, 2003